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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,953	08/22/2003	Vipin Samar	OR03-10201	8253

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ORACLE INTERNATIONAL CORPORATION
c/o PARK, VAUGHAN & FLEMING LLP
2820 FIFTH STREET
DAVIS, CA 95618-7759

EXAMINER

ROSE, HELENE ROBERTA

ART UNIT	PAPER NUMBER
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2163

MAIL DATE	DELIVERY MODE
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06/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/645,953		SAMAR, VIPIN	
	Examiner		Art Unit	
	Helene Rose		2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/24/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-14, 16-22 and 24 is/are pending in the application.
- 4a) Of the above claim(s) 7, 15 and 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-14, 16-22 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/12/07</u> . | 6) <input type="checkbox"/> Other: _____ |

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Detailed Action

1. In response to communication filed on 3/24/2007, Claims 1, 9, and 17 were amended. Claims 7, 15, and 23 were cancelled. No claims were added.
2. Applicant's arguments with respect to claims 1-6, 8-14, and 16-22, and 24 have been considered but are moot in view of the new ground(s) of rejection.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 3/12/2007 was filed after the mailing date of the application on 8/22/2003. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

Claim Rejections 35 U.S.C 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6, 8-14, 16-22, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elfering (WO 01/18631 A1, International Publication Date: March 15, 2001) in view of Shiu et al (GB 2386710A, Date of Filing: 3/18/2002).

Claims 1, 9 and 17:

Regarding Claims 1, 9 and 17, discloses a method, a computer-readable storage medium, and an apparatus utilizing the same functionalities. Shiu teaches a method, a computer-readable storage medium an apparatus for protecting an item of private information in a database, wherein the item of private information is used as a key, for retrieving data from the database comprising:

a receiving mechanism configured to receive the item of private information (page 19, lines 26-30, wherein the email server submits an email message including conditions under which the message may be released to the control point, wherein the control point device proceeds to encrypt the email and to sign the access policy data, wherein the control point then returns an enveloped file to the e-mail server 900, Shiu);

Shiu does not teach creating a hash of the item of private information at a database.

On the other hand, Elfering teaches creating a hash of the item of private information at a database (page 1, line 29, wherein this reads over “ generating a hashcode using a computational device for said unique identifier” , Elfering),

Elfering does not teach creating the hash further comprises checking a column attribute for a column, which stores the item of private information, in the database to determine that “ privacy” is enabled for the column and only upon privacy being enabled for the column,

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On the other hand, Shiu teach wherein creating the hash further comprises checking a column attribute for a column, which stores the item of private information, in the database to determine that “ privacy” is enabled for the column and only upon privacy being enabled for the column (page 8, lines 24–28, wherein a third party run service is used to authenticate and/or validate an access policy and to encrypt and decrypt a document, wherein a cryptographic specifically a private key to enforce both encryption and decryption and authentication an validation of the access policy; column 9, lines 4–27, wherein this reads over trust provider table which will validate authentication information against policy statements and will sign in a manner verifiable by the box that it has checked it and the device does however need to maintain a state with respect to its own identity that is to store it own digital certificate and public and private; and pages13–14, lines 25–32 and lines 1–11, wherein this reads over “ wherein the devices receives an electronic document from a web server computer along with an associated access policy data corresponding to the electronic document and the device encrypts the document and wherein the web server computer entity can store the enveloped data file in the database, and any person attempting to access the database cannot read the documents since it is encrypted, and any person requesting access to the document including encryption must satisfy the criteria for the access policy described by the access policy data comprising the file, Shiu).

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Shiu does not teach wherein storage mechanism configured to store the hash of the item of private information in the database.

On the other hand, Elfering teaches a storage mechanism configured to store the hash of the item of private information in the database (page 10, lines 34-35, wherein this reads over “ patient data can then be stored in a database where this hash-coded value now identifies the patient, Elfering).

It would have been obvious to one of the ordinary skill in the art at the time of applicant’ s invention to create and store hash in at a database, as disclosed by Elfering, within Shiu system.

A skilled artisan would have been motivated to do so for establishing an improved method for protecting a user identity/privacy as well as personal content from being accessed by an unknown user.

Claims 2,10, and 18:

Regarding claims 2,10, and 18, the combination of Shiu in view of Elfering teaches wherein creating the hash can include creating at least one of a Secure Hash Algorithm-1 and a Message-Digest Algorithm 5 (MD5) hash the hashing mechanism is configured to use SHA-1 or MD5 hashing functions (page 7-8, lines 29-30 and lines 3-6, Elfering).

Claims 3,11, and 19:

Regarding claims 3,11, and 19, the combination of Shiu in view of Elfering teaches wherein the hashing mechanism is internal to the database and is transparent to an application, which manipulates the private information (page 12,

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lines 8-20, wherein this reads over “ a server is set up which separates patient data and medical patient data but links both data sources on the server through a unique ID generated on the server, wherein both data bases have different access/user rights and are only accessible through a COM object layer that control access to the database, wherein the patient database contains a unique patient ID that is generated from unique information associated solely with that patient, wherein the hash code algorithm generates a fixed bit number that identifies uniquely the patient, Elfering).

Claims 4,12, and 20:

Regarding claims 4,12, and 20, the combination of Shiu in view of Elfering teaches a query mechanism configured to perform queries containing the private information, wherein the query mechanism is configured to:

receive the item of private information (Refer to claim 1, wherein this limitation is substantially the same/or similar and therefore rejected under the same rationale, Shiu);

create a hash (Refer to claim 1, wherein this limitation is substantially the same/or similar, Elfering); and

query the database using the hash of the item of private information (page 2, lines 10-11, wherein a means for querying the data on the server for instances of a hash code and data associated with it and receiving the results of said query and page 11, lines 26-30, wherein the database hold anonymous information about all patients, and if she selects any patient in the analysis the

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system queries her local databases and tries to find the hashcode value from that patient in the local database and if found it means that this physician knows the patient and the site can retrieve the patients name etc from the local database and displays this instead of the hash value, Elfering).

Claims 5,13, and 21:

Regarding claims 5, 13, and 21, the combination of Shiu in view of Elfering teaches wherein the item of private information can include one of:

a social security number;

a driver's license number;

a passport number;

an email address;

a person's name (page 5, lines 24-30, respectively and pages 11-12, lines 32-37 and lines 1-3, Elfering); and

a person's mother's maiden name.

Claims 6,14,and 22:

Regarding claims 6,14, and 22, the combination of Shiu in view of Elfering teaches wherein the hashing mechanism can be further configured to combine multiple items of private information prior to creating the hash (page 11, lines 5-12, wherein this reads over “ if anybody has to re-identify for a given patient he has to know what kinds of unique identifier string elements have been used and he has to have this information items from the patient, wherein for example in Germany one could and probably would use the insurance and member codes and

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one would either need to have access to the smartcard or the patient would need to give the medical provider this information and also this information is available on medical claims forms, prescriptions, smartcards, etc, wherein one can now recalculate the hashcode for these items and search the database(s) for all items equaling this item, Elfering).

Claims 8,16, and 24:

The combination of Shiu in view of Elfering does not teach wherein the database is a Lightweight Directory Access Protocol (LDAP) database.

On the other hand, Scheussler does teach wherein the database is a Lightweight Directory Access Protocol (LDAP) database (column 9, lines 28-30, wherein the server is configured to operate as a sever in accordance with the Light Weight Directory Access Protocol (LDAP), Scheussler).

It would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to incorporate wherein the database is a Lightweight Directory Access Protocol database as disclosed by Scheussler within Shiu and Elfering system.

A skilled artisan would have been motivated to do so for providing scalability and optimum performance within the database for allowing users to lookup/search queries.

Prior Art of Record

(The prior art made of record and not relied upon is considered pertinent to applicant's disclosure).

- | | |
|---------------------|-----------------------------------|
| 1. Scheussler et al | (US Patent No. 6,366,950) |
| 2. Balogh | (US Publication No. 2003/0084039) |
| 3. Robbins et al. | (US Patent No. 7,062,650) |
| 4. Maples et al | (US Patent No. 6,167,443) |
| 5. Elfering | (WO/ 01/18631) |
| 6. Shiu et al | (GB 2386710 A). |

Examiner Response to Arguments

Applicant's arguments filed on 3/24/2006, with respect to the rejected claims in view of the cited references have been considered but are moot in view of applicant's amended claims necessitate new ground(s) of rejection.

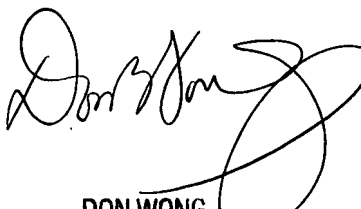
Point of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene R. Rose whose telephone number is (571) 272-0749. The examiner can normally be reached on 8:00am - 4:30pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HRR
Technology Center 2100
May 21, 2007


DON WONG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100